

REMARKS

Upon entry of the present amendment, claims 31-51 will remain pending in this application. Claims 1-30 were previously cancelled.

Claims 31-51 stand rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Claims 31-51 stand rejected under 35 U.S.C. § 102(e) as allegedly being unpatentable over U.S. Patent No. 6,480,836 (“Colby”). Claims 31-51 stand rejected under 35 U.S.C. § 102(b) as allegedly being unpatentable over U.S. Patent No. 6,205,447 (“Malloy”). Applicants respectfully traverse.

Interview Summary

Applicant’s undersigned representative, Mr. Eiferman, and Examiner André Pierre-Louis conducted a telephonic interview on January 17, 2007. During the interview, Mr. Eiferman proposed the above claim amendments, and Examiner Pierre-Louis stated that the proposed amendments appeared to overcome the rejections of record.

Double Patenting

Although the outstanding Office Action does not include a double patenting rejection, Applicants note that a terminal disclaimer is hereby filed along with this reply in compliance with 37 CFR 1.321(c) to overcome any potential double patenting rejection in connection with co-pending Application No. 10/199,612 pursuant to 37 CFR 1.130(b).

Rejections under 35 U.S.C. § 101

Claims 31-51 stand rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. In particular, the Office Action alleges that claims 1-42 fail to provide a tangible result. However, Applicants respectfully traverse and submit that independent claims 31, 38 and 45 provide tangible results such as, for example, but not limited to, “generating and displaying a data cube that comprises the measure and the first and second dimensions, the data cube being used for analytically modeling data from at least the first and second tables” Accordingly, reconsideration and withdrawal of the outstanding rejections under 35 U.S.C. § 101 are respectfully requested.

Rejections under 35 U.S.C. § 102

1. Claims 31-51 stand rejected under 35 U.S.C. § 102(e) as allegedly being unpatentable over U.S. Patent No. 6,480,836 (“Colby”). Applicants respectfully traverse.

The claimed invention enables a measure to be allocated across a dimension when there is no existing data table that includes such data. For example, consider the scenario in which there is existing data for forecasted sales per product category – but there is no existing data for forecasted sales per product category per customer (this scenario is depicted in Figs. 2, 3 and 5 of the present application). In this scenario, it may be desirable generate a cube that allocates forecasted sales of a product category (*i.e.*, product category Y) across certain customers. We know from Fig. 3 that there are 10 total forecasted sales for product category Y. However, we do not know how many of the 10 total forecasted sales to allocate to each of the customers.

The claimed invention provides a technique for allocating the 30 total forecasted sales of product category Y to each of the customers. First, the Forecast table (Fig. 5) is examined to identify all products (D and E) in product category Y. Then, the Sales table 300 (Fig. 2) is examined to identify all rows with one of the identified products D or E (these are rows 2 and 5 of Sales table 200). Then, each identified row is examined to determine the customers that are listed in the identified rows (these are customers 1 and 2). Then, the 10 total forecasted sales of product category Y are allocated across the identified customers. The 10 total forecasted sales of product category Y are allocated to only customers 1 and/or 2 (and not customer 3).

Colby discloses a system and method for determining and generating candidate views for a database. These candidate views are data tables that include a select portion of data that corresponds to anticipated user queries. For example, if it is anticipated that a user will submit a number of queries requesting information about forecasted sales totals for specific products during specific quarters, then an aggregated table may be generated that includes selected data from a forecasted sales table, a product table, and a time/period table. (Colby, Col. 7, ll. 61 – Col. 8, ll. 19).

Thus, although Colby discloses that *existing* data may be selected and aggregated to form a desired view, Colby does not teach or suggest allocating a measure when such data

does *not* exist. The process for performing this allocation is clearly recited in new independent claims 31, 38 and 45 as follows:

allocating a value of the measure for the entry of the first dimension by:

- identifying each row in the third table within which a value of the third attribute matches a value of the entry of the first dimension;
- identifying a value of the first attribute within each identified row in the third table, and, for each identified value of the first attribute:
 - identifying each row in the first table that includes the value of the first attribute, the first table including no data for the measure;
 - identifying a value of the second attribute within each identified row in the first table; and
 - identifying each entry in the second dimension for which a value of the entry of the second dimension matches an identified value of the second attribute; and
- allocating at least a portion of the value of the measure for the entry of the first dimension to at least one of each identified entry of the second dimension.

In particular, the above steps require allocating a measure (*e.g.*, the Forecasted sales measure) by identifying rows and attribute values within the first table (*e.g.*, the Sales table 200 of Fig. 2). However, the first table (*e.g.*, the Sales table 200 of Fig. 2) includes *no* data for measure (*e.g.*, the Forecasted sales measure). Colby does not teach or suggest allocating a measure by identifying rows and attribute values in a table that includes *no* data for the measure. Accordingly, Applicants respectfully submit that independent claims 31, 38 and 45 are not anticipated by Colby. Applicants further submit that dependent claims 32-37, 39-44 and 46-51 are patentable at least by reason of their dependency.

2. Claims 31-51 stand rejected under 35 U.S.C. § 102(b) as allegedly being unpatentable over U.S. Patent No. 6,205,447 (“Malloy”). Applicants respectfully traverse.

Malloy also fails to teach or suggest allocating a measure by identifying rows and attribute values in a table that includes *no* data for the measure. Thus, Malloy fails to teach or suggest the following features of independent claims 31, 38 and 45:

allocating a value of the measure for the entry of the first dimension
by:

- identifying each row in the third table within which a value of the third attribute matches a value of the entry of the first dimension;
- identifying a value of the first attribute within each identified row in the third table, and, for each identified value of the first attribute:
 - identifying each row in the first table that includes the value of the first attribute, the first table including no data for the measure;
 - identifying a value of the second attribute within each identified row in the first table; and
 - identifying each entry in the second dimension for which a value of the entry of the second dimension matches an identified value of the second attribute; and
- allocating at least a portion of the value of the measure for the entry of the first dimension to at least one of each identified entry of the second dimension.

Accordingly, Applicants respectfully submit that independent claims 31, 38 and 45 are not anticipated by Malloy. Applicants further submit that dependent claims 32-37, 39-44 and 46-51 are patentable at least by reason of their dependency. Accordingly, reconsideration and withdrawal of the 35 U.S.C. § 102 rejections are respectfully requested.

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PATENT

CONCLUSION

In view of the above amendments and remarks, Applicants respectfully submit that the present application is in condition for allowance. Applicants respectfully submit that no new matter has been added by the present amendment. Reconsideration of the application is respectfully requested.

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/Kenneth R. Eiferman/
Kenneth R. Eiferman
Registration No. 51,647

Woodcock Washburn LLP
Cira Centre, 12th Floor
2929 Arch Street
Philadelphia, PA 19104-2891
Telephone: (215) 568-3100
Facsimile: (215) 568-3439